

Phenoscope and Phenobase

ABSTRACT OF THE DISCLOSURE

5 The present invention describes a system and method of using individuals' behavioral and environmental information in conjunction with their gene sequences to find drug candidates and drug targets. Individuals designated as having a high risk for developing a particular disease are each given a remotely
10 programmable apparatus. Queries related to the individuals' behavior and environment are sent from a server to the remotely programmable apparatuses. The individuals' responses to the queries and any physiological information in the form of measurements are sent back to the server. The process of
15 collecting individuals' information can take place over a long period of time to ensure accurate data and to allow researchers to observe progression of the disease. A data mining program on the server analyzes the individuals' behavioral and environmental information, as well as their gene sequences. Differences in gene sequences, or in behavioral and
20 environmental factors between individuals who show a severe disease phenotype and those who show a mild severe disease phenotype can then be distinguished and used to develop new drug candidates, targets, or general treatments.